rapidly exhausts the kidneys and disturbs digestion, therefore it is a slow treatment, and it is not exempt from inconveniences. Theoretically the use of piperazine is very encouraging. An alkaloid of the pyridine group, it is not poisonous nor irritant; it is very soluble in water, even deliquescent. The combination of urate of soda and this drug is nearly nine times more soluble than the urate of lithia. In daily doses of from fifteen to forty-five grains it is without marked effects, unless it have a diuretic one. Vogt has found that under fifteen-grain daily doses the amount of urates is decreased, while that of urea increases. This goes to show that not only does this drug dissolve urates, but it is an oxidizing agent and modifies tissue change. On the other hand, the nitrogen which is eliminated is not increased, which shows that there is no increase of waste nor supplementary decomposition of albuminoids. The piperazine is excreted, undecomposed, by the kidneys. If used hypodermatically it causes acute pain and an infiltration more or less marked, and sometimes an abscess. It has been strongly recommended for gout, in that it relieves the pain, frees the engorged joints, and expels renal calculi. Patients who have suffered from nephritic colic, some days after the use of the drug experience a recrudescence of the pain, which is followed by the expulsion of a large calculus, which has apparently been diminished in size by the action of the drug. In this respect it appears to act with less danger than do the alkalies, and more rapidly than the flushing out of the kidneys with Vittel or Contréxeville waters. On the other hand, relief is sometimes slow in appearing, and colchicin when properly used is far more rapid; and further, piperazine is sometimes without effect. It is believed that the drug should be used, especially when others have failed, in from fifteen to thirty grains *per diem*, dissolved in a carbonated water, taken in two doses, fasting if possible.—*Revue de Thérapeutique Médico-chirurgicale*, 1894, No. 3, p. 74.

THE CRESOLS: TRICRESOL.

DR. OSCAR LIEBREICH presents this drug as an agent for disinfection for surgical and hygienic purposes. Taking the formula of carbolic acid as phenol, that is, a benzol in which a hydrogen atom is replaced by a hydroxyl group (HO), it is possible to have three isomeric bodies in which the hydrogen atom, which is replaced by the methyl group (CH_3), is more or less farther removed. These isomers may be designated ortho-, meta-, and para-cresol. A mixture of these three chemically pure bodies has been named tricresol. The value of carbolic acid as a disinfectant depends upon its percentage of the contained cresols. Recognizing the fact that creolin, solveol, and lysol owe their value as disinfecting properties to the cresols which they contain in varying proportions, it is also evident that they have limitations in the amount of cresols which they may contain, and as well there may be dangerous symptoms produced by their impurities. The pure cresols are soluble at ordinary temperature in water from 2 to 2½ per cent, and are used in from ½ to 2 per cent. solutions for medicinal purposes. These new products are undoubtedly a great advance, and it is quite likely that from tricresol a series of preparations may be made which will be of great value.—*Therapeutische Monatshefte*, 1894, Heft 1, S. 25.

MEDICINE.

UNDER THE CHARGE OF

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THE DIAGNOSTIC VALUE OF THE DIAZO REACTION (EHRLICH).

As a result of the systematic examination of 227 cases, of various nature, admitted into the Cork-Street Hospital, Dublin, DR. W. R. DAWSON arrives at the following conclusions as to the value of Ehrlich's test:

"1. That the diazo reaction is found in the great majority of cases of enteric fever at some period between the fifth and twenty-first days, and is more constant in that disease than in any other (of those tested) except measles, and, perhaps, acute phthisis, so that, with these reservations, its presence affords a presumption in favor of, its absence a much stronger presumption against, such a diagnosis.

"2. That the reaction cannot be used either positively or negatively to distinguish enteric fever from phthisis or measles, and that the presumption which it affords against typhus is small.

"3. That it is nearly or quite constant in measles, but absent in at least many cases of rötheln, and may, consequently, be used to distinguish between them.

"4. That the substance causing it does not indicate its presence by any peculiarity in the color, odor, deposit, reaction, or specific gravity of the urine, nor by the presence of albumin, sugar, or indican, although their concurrence is not uncommon.

"That it is not due to free acetone, nor to a direct product of the bacillus typhosus of Eberth."—*Dublin Medical Journal*, No. 258.

ALBUMINURIC ULCERATION OF THE BOWELS.

BEFORE the Medical and Chirurgical Society of London DR. W. H. DICKINSON has lately summarized his experience of twenty-two examples of this condition. The subject was referred to in his Croonian Lectures in 1876. In all the cases ulceration of the bowel was coincident with, and presumably pathologically connected with, renal disease. Eight instances are appended as of collateral interest, in which, under similar circumstances of renal disease, the bowel was the seat of hemorrhagic extravasation without ulceration.

The ulcers were not confined to any one part of the bowel, though most frequent in the lower part of the ileum, nor were they especially associated with any of the glandular structures. The most marked character of the